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TRANSMITTAL OF INFORMATION DISCLOSURE STATEMENT (Under 37 CFR 1.97(b) or 1.97(c))	Docket No. **DP-309936**

In Re Application Of: **William J. LaBarge, et al.**

OIPE JC42
JUN 23 2004
PATENT & TRADEMARK OFFICE

Serial No.	Filing Date	Examiner	Group Art Unit
10/811,131	**March 26, 2004**	**NYA**	**NYA**

Title: **CATALYTIC CONVERTER SYSTEM AND METHODS OF MAKING THE SAME**

Address to:
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

37 CFR 1.97(b)

1. ☒ The Information Disclosure Statement submitted herewith is being filed within three months of the filing of a national application other than a continued prosecution application under 37 CFR 1.53(d); within three months of the date of entry of the national stage as set forth in 37 CFR 1.491 in an international application; before the mailing of a first Office Action on the merits, or before the mailing of a first Office Action after the filing of a request for continued examination under 37 CFR 1.114.

37 CFR 1.97(c)

2. ☐ The Information Disclosure Statement submitted herewith is being filed after the period specified in 37 CFR 1.97(b), provided that the Information Disclosure Statement is filed before the mailing date of a Final Action under 37 CFR 1.113, a Notice of Allowance under 37 CFR 1.311, or an Action that otherwise closes prosecution in the application, and is accompanied by one of:

   ☐ the statement specified in 37 CFR 1.97(e);

   OR

   ☐ the fee set forth in 37 CFR 1.17(p).

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CATALYTIC CONVERTER SYSTEM AND METHODS OF MAKING THE SAME

Payment of Fee

(Only complete if Applicant elects to pay the fee set forth in 37 CFR 1.17(p))

☐ A check in the amount of is attached.

☒ The Director is hereby authorized to charge and credit Deposit Account No. **06-1130** as described below.

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Sonia Mancini

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Joel T. Charlton

Signature

Dated: **June 21, 2004**

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OIPE JC42
JUN 23 2004
PATENT & TRADEMARK OFFICE

DP-309936

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	William J. LaBarge, et al.	Group Art Unit: NYA
Serial No.:	10/811,131	Examiner: NYA
Filing Date:	March 26, 2004	
For:	CATALYTIC CONVERTER SYSTEM AND METHOD OF MAKING THE SAME	

Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT UNDER 37 CFR §§ 1.56, 1.97 AND 1.98

Sir:

In compliance with the duty to disclose, submitted herewith is form PTO-A820 (PTO-1449) listing publication(s) of which those designated by 37 CFR § 1.56 are aware. Copies of the non-United States patents or published applications are enclosed.

The filing of this Information Disclosure Statement shall not be construed as a representation that a search has been made, or an admission that the information cited is, or is considered to be, material to patentability.

Respectfully submitted,

CANTOR COLBURN LLP

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INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

Docket Number (Optional) DP-309936	Application Number 10/811,131
Applicant(s) William J. LaBarge, et al.	
Filing Date March 26, 2004	Group Art Unit NYA

EXAMINER INITIAL		OTHER DOCUMENTS *(Including Author, Title, Date, Pertinent Pages, Etc.)*
	1	M. H. Kim, et al., SAE 923925 "A Study on the Flow Characteristics of the Catalytic Converter in Automotive Emission", November 20, 1992, ABSTRACT ONLY (1 page)
	2	Masao Toi, et al., SAE 978312, "The Optimization of the Catalytic Converter Internal Flow by Using 3D-CFD", October 21, 2997, ABSTRACT ONLY (1 page)
	3	Herman Weltens, et al., SAE 930780, "Optimisation of Catalytic Converter Gas Flow Distribution by CFD Prediction", March 1-5, 1993, pp 131-151
	4	Sivanandi Rajadural, SAE 2001-28-0046, "Computer Application in Converter Development from Concept to Manufacturing", pp 329-338
	5	Sivanandi Rajadural, et al., SAE 2000-01-1417, "Catalytic Converter Design, Development and Manufacturing", pp 54-60
	6	R. J. Clarkson, et al., SAE 931071, "An Integrated Computational Model for the Optimisation of Monolith Catalytic Converters", pp 11-24
	7	D.G. Lloyd-Thomas, et al., SAE 931079, "Meeting Heat Flow Challenges in Automotive Catalyst Design with CFD", March 29 - April 1, 1993, pp 93-101
	8	Achim Heibel, et al., SAE 1999-01-0768, "A New Coverter Concept Providing Improved Flow Distribution and Space Utilization", March 1-4, 1999, pp 1-10
	9	Stephen Massey, et al., SAE 2002-01-0005, "Modelling Exhaust Systems Using One-Dimensional Methods", March 4-7, 2002, 5 pages
	10	H Knon, SAE 2001-01-3806, "Close-Coupled Converter Modeling with a Thinwall Substrate for a Gasoline Engine", November 19-22, 2001, 7 pages
	11	Richard J. Matus, SAE 941082, "Modelling of Exhaust System with CFD", April 12-13, 1994, pp 1-6
	12	Joachim Braun, et al., SAE 2002-01-0065, "Three-Dimensional Simulation of the Transient Behavior of a Three-Way Catalytic Converter", March 4-7, 2002, 11 pages

EXAMINER	DATE CONSIDERED

*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

INFORMATION DISCLOSURE CITATION *(Use several sheets if necessary)*	**Docket Number (Optional)** DP-309936	**Application Number** 10/811,131
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	Filing Date March 26, 2004	**Group Art Unit** NYA

*EXAMINER INITIAL		OTHER DOCUMENTS *(Including Author, Title, Date, Pertinent Pages, Etc.)*
	13	S. Park, et al., SAE 18-216-D2-161, "Simulation on the Characteristic of Gas Flow and Mixing for the Location of the Oxygen Sensor in the Exhaust System", November 19, 2001, pp 161-169
	14	S. F. Benjamin, et al., SAE 17-215-C4-379, "Modeling the Flow Distribution Through Automotive Catalytic Converters", February 2, 2001, pp 379-383
	15	S. Rajadurai, et al., SAE 990050, "Catalytic Converter Design, Development and Optimisation Using Computational Analysis and Engineering", pp 483-490
	16	N. S. Will, et al., SAE 94A035, "The Use of CFD as an Aid to Catalytic Converter Design", pp 387-397
	17	L. S. Mukadi, et al., "Modelling the three-way catalytic converter wioth mechanistic kinetics using the Newton-Krylov method on a parallel computer", Computers and Chemical Engineering 26 (2002), pp 439-455, October 18, 2001
	18	Soo-Jin Jeong, et al., "Simulation of Thermal and Flow Characteristics for Optimum Design of an Automotive Catalytic Converter", Chem. Eng. Comm., 189: 1314-1339, 2002, June 28, 2000
	19	T. Shamim, et al., "A Comprehensive Model to Predict Three-Way Catalytic Converter Performance", Journal of Engineering for Gas Turbines and Power, April 2002, Vol. 124, pp 421-428
	20	Soo-Jin Jeong, et al., "An Application of CFD to Improve Warm-up Performance of the 3-way Auto-Catalyst by High Surface Area and Low Thermal Mass", Int. J. of Vehicle Design, Vol. 29, No. 3, 2002, pp 243-268
	21	Dimitrios N. Tsinoglou, et al., "Oxygen Storage Modeling in Three-Way Catalytic Converters", Ind. Eng. Chem. Res. 2002, 41, pp 1152-1165, Published 01/30/2002
	22	Sandip Mazumder, et al., "Sub-Grid Scale Modeling of Heterogeneous Chemical Reactions and Transport in Full-Scale Catalytic Converters", Combustion and Flame 131:85-97 (2002)
	23	Benlin Liu, et al., "Experimental Study of a Reverse Flow Catalytic Converter for a Dual Fuel Engine", The Canadian Journal of Chemical Engineering, Volume 79, August 2001, pp 491-506
	24	V. Yakhnin, et al., "Stationary and Traveling Hot Sports in the Catalytic Combustion of Hydrogen in Monoliths", Chemical Engineering Science 57 (2002) pp 4559-4567

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	25	S-J. Jeong, et al., "A Three-Dimensional Numerical Study of the Effect of Pulsating Flow on Conversion Efficiency Inside a Catalytic Converter", Proc. Instn Mech Engrs, Vol. 215, Part D, pp 45-61

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